



IFIP/IEEE International Conference on Management of Multimedia Networks and Services



MMNS 2002

Managing IP Multimedia End-To-End

October 6-9, 2002

Santa Barbara, CA USA

<http://www.cs.ucsb.edu/conferences/MMNS02>

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Call For Participation

With the popularity of the IP-based Internet, there has been a major shift towards building a worldwide, all-service and all-media network based on the next-generation of IP technology. Rich multimedia is increasingly being incorporated into Internet applications (like Voice-over-IP, streaming video, etc.). However, more work is needed to evolve the Internet and the underlying networking technologies into an infrastructure capable of supporting all-service and all-media traffic. Significant management functionality is required to ensure that these applications have a network that is both capable and available. Management requirements may ensue from the fact that multimedia traffic may traverse networks using a wide variety of technology and each network may be owned, operated, and controlled by a different organization. In order to provide end-to-end, high quality multimedia services, the network must provide robust management functionality.

The IFIP/IEEE International Conference on Management of Multimedia Networks and Services will hold its fifth annual meeting Oct. 6 through Oct. 9, 2002 in Santa Barbara, CA. The IFIP/IEEE MMNS is a single-track conference and provides an intimate setting for discussion and debate. Two half-day tutorials provide an exciting opportunity to gain an in-depth view of current topics of interest. The technical program covers three days, consisting of a keynote address, an invited talk, a panel discussion, and the presentation of twenty-seven papers in eight separate sessions. A social event is also scheduled. So, please join us.

Registration

Early registration ends on September 6, 2002. You may register for the conference on-line at the web site, <http://www.cs.ucsb.edu/conferences/MMNS02/register.html>. For any further information, please refer to the conference home page or direct your questions to almeroth@cs.ucsb.edu.

Tutorials

Sunday, October 6

Network Performance Monitoring and Measurement Techniques

09:00-12:00

Supratik Bhattacharyya (supratik@sprintlabs.com) and Sue B. Moon (sbmoon@sprintlabs.com), Sprint ATL

As the Internet continues to grow rapidly in size and complexity, it has become increasingly clear that its evolution is closely tied to a detailed understanding of network traffic. Consequently, the development of tools and techniques to capture Internet traffic and its properties has gained widespread attention. This tutorial covers various approaches for monitoring and measuring Internet traffic and techniques for analyzing and interpreting its properties.

Service Network Control in Multi-Technology Environments

13:00-16:00

Aleksandar (Sasha) Ratkovic, CTO, CPLANE (sasha@cplane.com)

The network is a purpose built utility designed to generate service revenue for the provider and allow the growth of business. In addition to providing network service, Service Providers (SPs) also want to make optimal use of its network resources in order to derive maximum profit from the business. The basic mechanisms that are used to provide network services and optimize network resource utilization have been around for a while. All these mechanisms are parametrized by a set of well-defined parameters. What was subject to constant change were implementations of these mechanisms and protocols used for setting the mechanism's parameters. This implies that it is possible to implement a unified model (multi vendor, multi technology) of the network state, which contains the state of all modules implementing fundamental mechanisms.

Advance Program

Session 1 - Service Management	Monday, October 7	10:20-12:00
<i>A QoS Network Management System for Robust and Reliable Multimedia Services</i> Shirshanka Das, Kenshin Yamada, Heeyeol Yu, S.S. Lee, Mario Gerla <i>Federated Accounting Management System Architecture for Multimedia Service Usage Management</i> Bharat Bhushan, Thomas Gringel, Conor Ryan, Eric Leray, Eamonn de Leastar, James Cloney <i>Policy-Based QoS and Security Management for Multimedia Services in the RTIPA project</i> Valerie Gay, Sandrine Duflos, Brigitte Kervella, Gladys Diaz, Eric Horlait <i>Formal Modeling of Service Session Management</i> Minh van Le, Bert-Jan van Beijnum, Leo de Goede		
Session 2 -- Management of Wireless Multimedia	Monday, October 7	13:00-14:15
<i>Network Requirement for Management of Multimedia over Wireless Channel</i> Bing Zheng, Mohammed Atiquzzaman <i>Agile Systems Manager For Enterprise Wireless Networks</i> Sandeep Adwankar, Venu Vasudevan <i>System performance of HiperLAN/2</i> Kamiran Haider, Hamed Al-Raweshidy		
Session 3 -- Bandwidth Sharing Protocols	Monday, October 7	14:35-16:00
<i>Streaming Media Congestion Control using Bandwidth Estimation</i> Nadeem Aboobaker, David Chanady, Mario Gerla, M. Y. Sanadidi <i>Signaling Protocol for Session-Aware Popularity Resource Allocation</i> Paulo Mendes, Henning Schulzrinne, Edmundo Monteiro <i>On Proxy-Caching Mechanisms for Cooperative Video Streaming in Heterogeneous Environments</i> Naoki Wakamiya, Masayuki Murata, Hideo Miyahara		
Session 4 -- Management Systems	Tuesday, October 8	10:10-11:50
<i>Using CORBA's To Enhance The Integrity Of QoS Management</i> Qiang Gu, Alan Marshall <i>Remote Multicast Monitoring Using the RTP MIB</i> Julian Chesterfield, Bill Fenner, Lee Breslau <i>Active Technology as an efficient approach to control DiffServ networks</i> Nadjib Achir, Mauro Fonseca, Yacine Ghamri, Nazim Agoulmine, Guy Pujolle <i>Efficient Implementation of the DWCS Algorithm on High-Speed Programmable Network Processors</i> Weidong Shi, Xiatong Zhuang, Indrani Paul, Karsten Schwan		
Session 5 -- Differentiated Network Services	Tuesday, October 8	13:00-15:05
<i>Distributed Dynamic Capacity Contracting: A congestion pricing framework for Diff-Serv</i> Murat Yuksel, Shivkumar Kalyanaraman <i>Fair Stateless Aggregate Traffic Marking using Active Queue Management</i> Abhimanyu Das, Dutta Debroyjoti, Ahmed Helmy <i>A Dynamic Marking Scheme of Assured Service for Alleviating Unfairness Among Service Level Agreements</i> Seung-Joon Seok, Seok-Min Hong, Sung-Hyuck Lee, and Chul-Hee Kang <i>Minimizing Transmission Costs through Adaptive Marking in Differentiated Services Networks</i> Chen Khong Tham, Yong Liu <i>Dynamic QoS Adaptation using COPS and Network Monitoring Feedback</i> Toufik Ahmed, Ahmed Mehaoua, Raouf Boutaba		
Session 6 -- User Level Traffic Adaptation	Wednesday, October 9	09:00-10:40
<i>Design and Implementation of an Application Layer Protocol for Reducing User-Hints and Policies</i> William Kulju, Hanan Lutfiyya <i>A Management Framework for Service Personalization</i> Govindan Ravindran, Muhammad Jaseemudin, Abdullah Rayhan <i>Efficient Access using Hierarchical WML Decks for Multimedia Services under Wireless and Mobile Networks</i> Dae-gun Kim, Seung-jin Lee, Lynn Choi, Chul-Hee Kang <i>Roaming Scenarios based on SIP</i> Andrea Floris, Luca Veltri		
Session 7 -- Multicast Congestion Control	Wednesday, October 9	11:00-12:15
<i>Low-Weight Congestion Control for Multi-Sender Applications</i> Jeremiah Scholl, Peter Parnes <i>Routing-based Video Multicast Congestion Control</i> Jun Peng, Biplab Sikdar <i>Random Early Detection Assisted Layered Multicast</i> Yung-Sze Gan, Chen Khong Tham		